Communicating climate science

Description

The science is clear, the climate is changing. Climate science research offers irrefutable evidence of our changing climate, using observations and monitoring of past and current climatic conditions to tell us about changes already occurring. This work also informs climate projections, providing compelling indications of what our future climate could look like in different emission scenarios.

Climate research centres around the globe, including the Met Office Hadley Centre for Climate Science and Services, regularly publish new climate research and contribute to climate science reports such as the assessment reports of the Intergovernmental Panel on Climate Change (IPCC). Scientific publications and climate data provide detailed science and information which can be invaluable to other researchers but which can, at times, be somewhat inaccessible to those less familiar with scientific terminology or data analysis.

Bringing climate science to life

It came as no particular surprise to us that one of the conclusions from the Met Office Climate Science Conference 2021 was that greater ambition in climate science communications is needed. Through the discussions and activities during the conference, it became clear that communications professionals such as designers, artists, actors, writers, singers and comedians need to work closely with scientists, activists, community representatives and others to develop new, more effective ways of talking about climate change. Climate science and data needs to be used to tell stories about climate change which resonate with different groups of people, from policymakers to the developers of climate services, and from businesses to the public.

> *Poet Mr Gee (@mrgeepoet) wrote a poem during the Met Office Climate Science Conference highlighting key points from the event*.

Individuals have different preferences for how they receive information, whether that be through, for example, video, audio, creative design or written communication such as poetry. Finding creative and varied ways to bring climate science to life can help the stories of climate change be told.

Professor Peter Stott is a Met Office Science Fellow in Climate Attribution and also one of the team behind Climate Stories, a multi-disciplinary group passionate about telling stories around climate change. “We know that our climate is changing and we need to share what this means with as many people as possible,” explains Peter. “By exploring creative ways of storytelling, we can help make science accessible for all, raising awareness and encouraging action.”

The art of storytelling

During June, we will be exploring storytelling, considering how we can use climate data and science to raise awareness of climate change and provide individuals, organisations, communities and governments with the information they need to take appropriate action in their lives and work. Follow

#GetClimateReady on Twitter as we share examples of ‘storytelling through data’.

Get ready for tomorrow #GetClimateReady

Date Created
June 2022

Met Office hosts South African National Space Agency visit

Description

The space weather teams from SANSA and the Met Office

The Met Office Space Weather Operations Centre (MOSWOC) recently welcomed experts from the South African National Space Agency (SANSA) ahead of its upcoming launch of a 24/7 space weather forecasting service.

MOSWOC has been a producing 24/7 forecasts since 2014, helping inform key industries on the latest forecasts for solar activity, including sunspots, solar flares and coronal mass ejections. SANSA has been operating during office hours since 2010 and is due to launch a 24/7 space weather service later in 2022, boosting its capability to produce space weather forecasts for the benefit of Africa.

As part of the move to a 24/7 service, SANSA is adding to its roster of space weather forecasters, moving from just two people in the Centre to six forecasters, with the team visiting the Met Office as part of their training.

Dr Mpho Tshisaphungo, Head of Space Weather at SANSA, said: “We have gained a lot of new insights into space weather forecasting 24/7. Our forecasters have learned a lot on the space weather desk working alongside MOSWOC forecasters. Newer members of our team already received training at SANSA on the background physics of space weather but have a need for international exposure and

learning more about what the Met Office does with forecasting, coronal mass ejection analysis and sunspot classifications, including techniques and models for forecasting.

“We have also learned a lot on some of the other services that the Met Office has in space weather and we’ve talked a lot about roster management for 24/7 as we’ll obviously be doing that soon.”

The move to a 24/7 operation for SANSA has resulted in a move to a new purpose-built Centre at Hermanus near Cape Town, offering space weather forecasting services to the aviation sector to start with.

Dr Tshisaphungo continued: “The reason we’re going 24/7 is because we have been designated as a regional centre to provide space weather products and services to the aviation sector by the International Civil Aviation Organisation (ICAO). They need the space weather information on a 24/7 basis which is one of the main drivers behind us expanding our capability.”

SANSA will produce space weather products covering the whole of Africa and join just a handful of space weather centres in the world who operate on a 24/7 basis.

Met Office Senior Account Manager of Space Weather Krista Hammond said: “It has been great having SANSA come and work with us for a few weeks. As well as our forecasters working alongside each other, we have discussed in depth our current operations, recent developments, and future plans. This has been a great exchange of knowledge with us learning more about the areas of space weather forecasting and research that they are involved with.

“The relationship between MOSWOC and SANSA goes back to when we first started operationally forecasting space weather here in the UK so it’s a really important one for us. There aren’t that many space weather centres in the world with a 24/7 forecasting capability so we’re delighted to be able to share our experience in this area with SANSA to support them in their journey.

“International collaboration is incredibly important in space weather forecasting. Space weather is a global phenomenon and doesn’t recognise geographical borders, which is why it’s crucial to work across those borders and share knowledge and learn from each other when we can.”

Hear more from Dr Tshisaphungo on the Met Office Weather Snap podcast below.

27 May Weather Snap

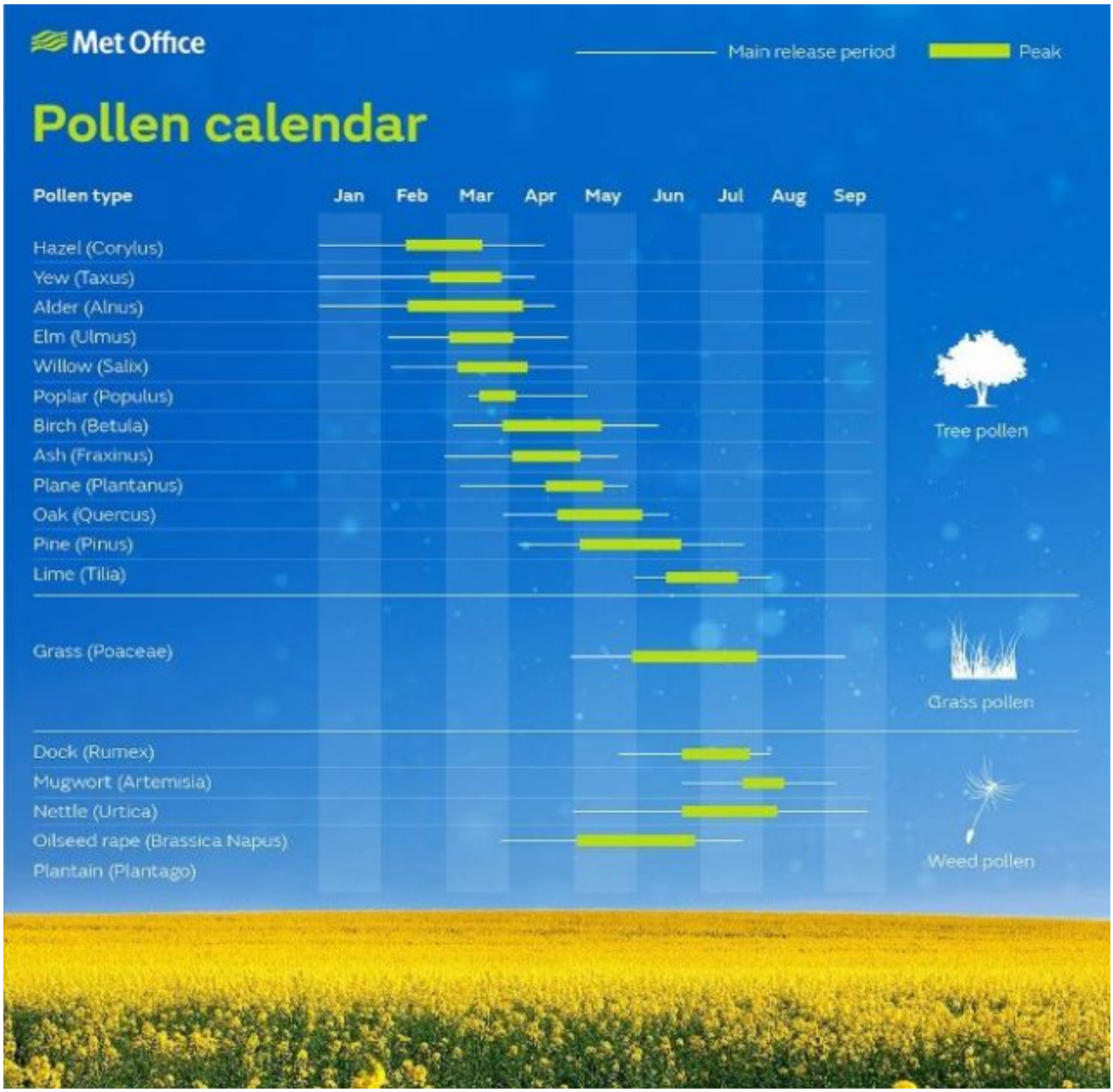
Date Created
June 2022

A change in the pollen season – but is it worse than normal?

Description

The effects of hay fever are already increasingly being felt across the UK, with grass pollen now fully in focus following the spring release of many types of tree pollen.

The pollen forecast is high or very high for many areas of England and Wales over the next week, with different species of grass now releasing pollen into the air, which will continue to impact the one in five people who suffer from hay fever in the UK.



The ‘typical’ pollen season

Speaking to the Weather Snap podcast, Met Office Relationship Manager for Health and Air Quality Yolanda Clewlow said: “The grass pollen season usually follows quite a consistent pattern and there tends to be two peaks, one in the first half of June and then another one in early July. That’s because we have about 150 different species of grass and they all flower at different times over spring and summer, although only some of them are allergenic.”

2022 pollen outlook

Although many species of tree have already passed their peak pollen release phase, the vast majority of hay fever sufferers have an allergy to grass pollen. With levels high or very high in many southern and central areas of the UK in the coming week, many are wondering if it’s worse than normal this year, and the answer isn’t as straightforward as you might think.

Yolanda said: “In terms of the numbers of pollen grains in the air, what we’re seeing isn’t especially noteworthy compared to what we’ve had in previous years. However, the potency of these pollen grains could be more intense this year, and that comes down to the weather we’ve had in spring.

“A warm and wet May, coupled with a relatively warm spring, means there’s a chance that the pollen that has developed is particularly potent, even if the amounts aren’t dramatically different.”

According to Met Office provisional statistics, May 2022 was the fifth warmest on record, with slightly above average rainfall for the UK. That, coupled with a warm spring overall, has meant good growing conditions for some species of grass.

Advice

Advice on dealing with Hayfever is available as part of WeatherReady with the Met Office. According to Yolanda, one of the best defences is to keep an eye on the pollen forecast.

“The best defence against symptoms is to avoid the stimulus,” said Yolanda.

“Avoiding the pollen that you have an allergy to can really help and the levels of pollen in the air can fluctuate dramatically through the day. What’s typical is that a gentle breeze will lift the pollen off the plants early in the morning, the warm air will then carry this up and it’ll be optimal for getting into our lungs in mid-to-late morning. Interestingly, by the very middle of the day the pollen will often be carried up very high in the atmosphere, which can make the pollen count much lower near the ground. And then you can get that extra burst of pollen again in the evening as the air cools and allows the pollen to settle.”

Are you WeatherReady? Check pollen levels before heading out.

Super pollen? Not so much…

In recent days, the media has been reporting on ‘super pollen’ associated with thundery conditions. Yolanda says that although the term has no scientific basis, there is ongoing research in this area.

She said: “We have a few phrases pop up in the media like ‘super pollen’, ‘pollen bomb’ and ‘thunder fever’, but these aren’t scientific terms and not recognised as a meteorological phenomenon. What is being looked at is something called thunderstorm asthma, which isn’t well understood globally, but it’s looking at how, in very specific conditions, there’s a chance that thunder and lightning can increase the symptoms of those with hay fever. Whether that’s down to airflows or lightning splitting pollen grains open, it’s too early to say, but it’s something that is in active research with our health partners.”

Hear more from Yolanda on the Weather Snap podcast with Clare Nasir.

Find more pollen advice as part of WeatherReady with the Met Office.

Date Created
June 2022

When was the wettest Glastonbury? The festival’s weather records…

Description

As well as playing host to some iconic music stars, Glastonbury Festival has also featured the UK’s favourite (or least favourite) supporting act… the weather.

Glastonbury Festival (Image: Shutterstock)

The first Glastonbury Festival, then called the Pilton Pop, Folk and Blues Festival, took place in September 1970, featuring Wayne Fontana, T-Rex and Steamhammer. In the following 52 years, the festival has been subject to a typical mix of UK summer weather, with wind, sun and, of course, rain.

Using Met Office data from nearby weather stations, the records for Glastonbury Festival tells a story of some unforgettable festivals, with a real mix of conditions.

When was the wettest Glastonbury?

Although normally a summer festival, Glastonbury isn't immune to a downpour of rain (Image: Shutterstock)

In what will come as no surprise to anyone who was there, Glastonbury 2007 holds the record for the wettest day of the festival. 60.1mm of rain fell in a single day at Rodney Stoke, a nearby station to the event.

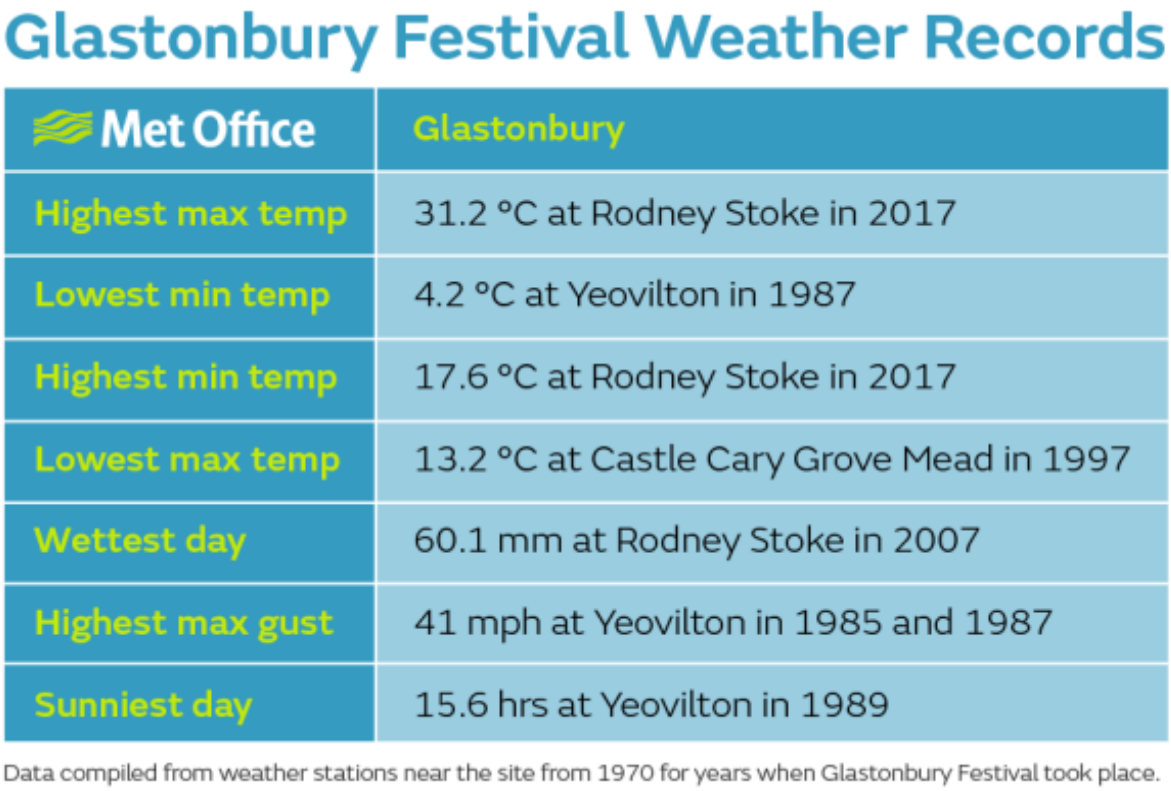
For other unsettled weather, the highest gust speed recorded for Glastonbury was 41mph, which has been reached at Yeovilton in 1985 and 1987 during the event.

Although 1997's iteration is dubbed the 'year of the mud' on the Glastonbury website thanks to a deluge of rain in the days preceding the event, it actually holds the record for the lowest maximum temperature recorded on a day of the event, with 13.2°C as high as the temperature reached at Castle Cary Grove Mead.

When was the hottest Glastonbury?

In 2017, with The Foo Fighters headlining, the mercury reached a balmy 31.2°C at Rodney Stoke, while the highest minimum temperature was recorded in the same year, with 17.6°C at the same location.

The sunniest day of Glastonbury on record was in 1989, when a station at Yeovilton recorded approximately 15 hours and 36 minutes of sunshine.



Glastonbury Festival Weather Records

Met Office	Glastonbury
Highest max temp	31.2 °C at Rodney Stoke in 2017
Lowest min temp	4.2 °C at Yeovilton in 1987
Highest min temp	17.6 °C at Rodney Stoke in 2017
Lowest max temp	13.2 °C at Castle Cary Grove Mead in 1997
Wettest day	60.1 mm at Rodney Stoke in 2007
Highest max gust	41 mph at Yeovilton in 1985 and 1987
Sunniest day	15.6 hrs at Yeovilton in 1989

Data compiled from weather stations near the site from 1970 for years when Glastonbury Festival took place.

Glastonbury Festival Weather Records

Weather forecast for Glastonbury 2022

With still over a week to go until Glastonbury 2022, there's much uncertainty about the conditions in the area for the duration of the festival, although there are some promising signs.

Speaking during the Met Office 10 Day Trend forecast, Presenter Aidan McGivern said: "The first signs for Glastonbury is for high pressure to the west possibly building in later next week and that would lead to more settled weather for the southwest of the UK in particular.

"As a result of the higher pressure, it's likely to turn drier and warmer compared with earlier in the week, although no signs of a heatwave at the moment."

Check the Met Office app or online for a more detailed Glastonbury forecast nearer the time.

Find advice on getting out and about this summer with WeatherReady.

Met Office 10 Day Trend with Aidan McGivern gives a forward look to what the weather is doing in the run-up to Glastonbury 2022.

Date Created
June 2022

Looking into the future of climate modelling

Description

The Met Office supercomputing system is one of the most powerful in the world dedicated to weather and climate. It has allowed the UK research community to produce some of the most advanced climate modelling information available, for example in the UK Climate Projections.

These projections are invaluable for informing decisions on how we respond to the challenges of climate change. Increasing our supercomputing capacity will increase the capability of our climate models and improve their ability to produce climate projections for the benefit of society.

Advances in supercomputing capability are providing climate scientists and meteorologists with ever-improving forecasts and climate projections. Picture: Met Office.

Whilst our capacity is increasing significantly with new supercomputing capabilities, there are still decisions to be made about how to best use this resource, a topic which is being debated by climate scientists.

The debate about the future of climate modelling relates to three key areas: increasing resolution; improving the realism of climate models to capture more elements of the earth's system; and increasing the frequency of the number of times a model is run to examine the likely frequency and

intensity of extreme weather events which may only happen relatively infrequently.

This week several new scientific commentary pieces have been published in the journal Nature Climate Change which explore different aspects of the future of climate modelling.

One of the commentary pieces has been led by Prof Dame Julia Slingo – a former Met Office chief scientist – and looks at the climate benefits of ultra-high-resolution climate modelling down to a spatial scale of one-kilometre: sometime referred to as k-scale.

Prof Stephen Belcher, Chief Scientist at the UK Met Office, is a co-author on the paper. He said: “Year on year we are seeing increasingly severe impacts of climate change, affecting communities around the world. Our scientific understanding has moved on, as have the technological developments in computing and data storage.

“Making the most of increasing technological capability to understand more about the impacts of climate change to come is vital for our future resilience.”

Capturing more of the earth’s system

However, it’s not just increasing resolution that needs to be considered when it comes to climate modelling. In another comment piece led by Dr Helene Hewitt OBE, the benefits of increasing the capability of climate models to capture more of the earth’s system are discussed.

The piece looks at the value of modelling specific aspects of the ocean to better understand climate. She said: “There are some elements of the ocean such as the Atlantic Overturning Meridional Circulation (AMOC) – which in part contains the Gulf Stream – and sea level rise which are of particular concern for the UK and global climate.

“Capturing the small drivers, such as eddies and coastal effects, which can have large influences on high-impact low-likelihood events like AMOC or Antarctic ice sheet collapse are imperative for gaining an improved understanding for assessing climate risk.”

Overall, climate models might be complex, but they are vital for understanding climate change. Through working with decision makers to find the correct balance between the three key areas, future climate models will be key tools for providing people with the information they need so we can stay safe and thrive.

Date Created
June 2022

Poles apart: latest Met Office sea ice report published

Description

The latest stocktake of sea ice in the Arctic and the Antarctic has just been published by the Met Office.

It might be tempting to consider the many apparent similarities between the polar regions, but there are also key differences that can be seen in the annual cycle of the regions' sea ice.

The year-to-year and decade-to-decade variability in the extent of sea ice can help scientists understand a lot about the impacts of both weather and climate change.

Dr Ed Blockley leads the polar team at the Met Office. He said: "Perhaps the most obvious difference is that Antarctica is a large continent ringed by ocean, whereas the Arctic is a region of ocean hemmed in by continental land masses. This difference in geography means that sea ice formation has differing influences at each end of the earth."

The Met Office briefing on Arctic and Antarctic sea ice shows that Antarctica set a new record minimum in the southern hemisphere (austral) summer, beating the previous low in March 2017. Researchers from British Antarctic Survey looked at the factors behind the February minimum concluding that storms had the effect of displacing sea ice by pushing it away from the continent toward relatively warmer waters, leading to the record low.

You can hear an interview with Professor John Turner of British Antarctic Survey in the latest episode of our Weather Snap podcast. In mid June Antarctic sea ice extent remains very low for the time of year and on 10 June was equal lowest with 2019.

Arctic sea ice extent on 10 June in the northern hemisphere summer was the eleventh lowest on record for the time of year, following relatively slow ice loss during May. Consistent records of Arctic and Antarctic sea ice began in 1979 during the development of the satellite era.

Although the extent of sea ice shows large variation between years, in the Arctic the downward trend means the region is losing ice at an alarming rate.

Ed Blockley added: “Arctic sea ice extent has declined in all seasons but much more so at the summer minimum in September for which we have seen a reduction of around 13% per decade. This equates to an average annual loss of September sea ice extent of more than 85,000 sq km – an area over four times the size of Wales!”

However, the trend for the Antarctic is less clear. In part this is due to the variability of weather around the Antarctic continent which has a huge influence on sea ice. Another large area of difference between the two poles is the amount of data scientists have for each pole.

Ed Blockley added: “Satellites – looking down on the ebb and flow of sea ice – provide an invaluable record, but other sets of data can provide a richer understanding of sea ice. For example, in the Arctic measurements of sea ice thickness have been taken by submarines which can travel under the ice. Much less of this sort of data is available for the Antarctic. This leaves scientists facing greater uncertainty about sea ice around the continent as we only have measurements in two dimensions and not three dimensions like we have for the Arctic.”

Date Created
June 2022

How we make our 2050 ‘forecasts’, and why we do them

Description

You may have seen some of our forecasts that look a little further ahead than you would usually expect. Although they use the same graphics as our normal weather forecasts, we’ve been producing theoretical ‘forecasts’ for 2050 to look at what conditions we could expect to see in the UK if global greenhouse gas emissions continue to rise.

One of the greatest challenges with communicating the risks of climate change is how to show, in a relatable way, how changes in our atmosphere could impact the weather we experience on the Earth’s surface. By showing what the weather could look like by 2050 at certain times of year, it helps people relate to how different their experiences might be under a changing climate.

To date we’ve produced plausible scenarios for a July 2050 heatwave, Wimbledon and Christmas 2054 , and now we’ve examined how Glastonbury could look in 30 years’ time.

Plausible scenarios

The key aspect to these ‘forecasts’ is that they are plausible weather events for 2050. Of course, it isn’t possible to create a genuine weather forecast for 2050, however it is possible to generate a realistic forecast based on the atmospheric conditions projected for the future.

The future forecasts are based on climate projections using a high-emissions scenario. One of the biggest sources of uncertainty in climate change is how much the world manages to reduce greenhouse gas emissions in the years to come. That’s why climate scientists model future global warming under various scenarios.

Although these forecasts use one of the higher emission scenarios (RCP8.5), in the middle of the century – where we are focusing – the difference in climate response between scenarios is much less than later in the century when the benefits of mitigation actions taking place now become much more apparent.

Extracting the data

Using Met Office climate modelling expertise, we can look to the future and provide data to our presenting team who generate the graphics to accompany the outlook.

Dr James Pope, a member of the Met Office UK Climate Projections (UKCP) team, explains how this works:

“Using our latest UKCP18 climate projections for the UK, we can examine in detail the various model runs for a specific period in time. Because the climate model works in the same way as our weather forecasting model, we can look at specific dates of interest – for example when Wimbledon usually occurs, or Christmas Day.

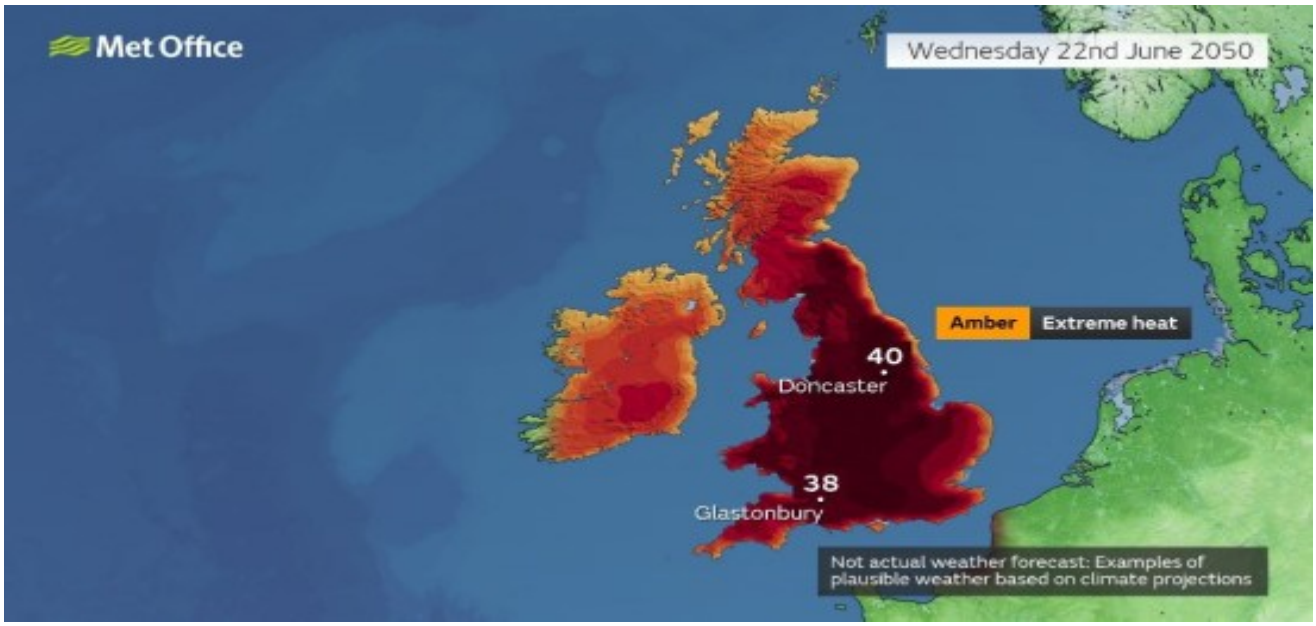
“In this example we’ve looked at 22-26 June 2050, the time of year when Glastonbury usually takes place. We can then assess the various model runs, as there are multiple outputs which are based on slightly different atmospheric conditions, to see if there are any notable weather events at that time of year.

“The output from one such model run showed a significant heatwave, with daytime temperatures reaching 38°C and overnight temperatures never getting below 23°C. As such, the ‘forecast’ that we are generating for 2050 is a plausible scenario that, depending on future greenhouse gas emissions, *could* happen in the future.”

Presenting the future

Once James has downloaded the relevant data, he passes it on to Met Office Presenter Aidan McGivern who then uses our visualisation software to generate the presented forecast.

Aidan explains more: “Because the climate model works in the same way as our operational weather model, we can input data from our climate projections and display it like a normal weather forecast. By using the same colour palette as the current operational forecasts, it helps to show the intensity of the heat that we could realistically see by 2050.



Map of the UK showing the visualisation of the climate data in a weather forecast format, with clear notes that it isn’t an actual weather forecast.

“When scientists talk about 1°C or 1.5°C of global warming it might not sound like much, but there are wider impacts on our weather system as a consequence of climate change. Linking these ‘forecasts’ to national events makes climate change very real. In this example daytime highs of 38°C would be extremely uncomfortable in a festival environment, and with temperatures never dipping below 23°C at night there is no relief from the heat, conditions that can pose significant health risks.

“It’s really important to make sure that people understand that this is not a real forecast, but a possible

scenario for the future. Consequently, we mark up the graphics that show up behind me with very clear dates and a note that this is not an actual weather forecast! I always include an explanation at the end of the videos discussing how we make the videos, why they are plausible scenarios and how things could be different if swift action is taken to lower greenhouse gas emissions."

Met Office Presenter Aidan McGivern in the studio recording the 2050 'forecast'

So that's how it's done and why we do it. Here's the latest example that James and Aidan have created for what Glastonbury 2050 could look like if greenhouse gas emissions continue to rise.

Date Created
June 2022

Talking climate change – using podcasts to bring climate science to life

Description

Dr Rosie Oakes is a Senior Scientist in the International Climate Services team at the Met Office and co-host of our Mostly Climate podcast. Here she talks about using podcasts to communicate climate science.

Climate change. It's a subject that is starting to come up in conversations about all aspects of our lives. Are flood defences high enough? How can we plan cities for the future? Are some areas of the world going to become unsuitable for human habitation?

Dr Rosie Oakes

The science on climate change is clear, the climate is changing. Climate scientists around the world are continuing to refine their understanding of the drivers and impacts of climate change, however, these results often end up in scientific publications or global assessment reports which can be inaccessible to those without technical training.

The most recent report from the Intergovernmental Panel on Climate Change (IPCC), for example, was a staggering 3,949 pages long…and that's just the section on the science of climate change. The reports on adaptation and mitigation were each almost as long. Not exactly something you want to dig into over a bowl of cornflakes.

There is a need for climate scientists and communicators to work together to bridge the gap between technical scientific information and non-technical users who want to understand the science to help inform decisions in their work and everyday life. The great thing about this is that there are lots of ways to do this including poetry, art, music, cartoons and podcasts, which I'll focus on for the rest of the blog.

Podcasts, unlike 3,949 page science reports, are well suited to be enjoyed with a bowl of cornflakes or on the bus on the way to work. As a climate scientist at the Met Office, I spend most my time reading technical articles on climate change, analysing data, talking to people about climate change and writing reports. On my commute on the way home, I want to learn about what's going on in the world, but I don't have any extra brain power left to read news articles or reports on technical subjects.

In steps the humble podcast. Over my 30-minute bus journey, I can learn about how gut health affects mental health, how agricultural practices can alter carbon storage in soils, or how rock-paper-scissors was used to decide the sale of a major art collection! There is absolutely no way I would have been

able to read an article on any of those topics at the end of the day when my brain feels like it's turned to mush, but listening to a podcast feels like a conversation with a friend. My favourite feature is that you can rewind 30 seconds if your brain accidentally has a snooze!

So how about climate science? Can we make it more accessible to a wider audience by sharing it in a friendly podcast format? We really hope so as this is what Dr. Doug McNeall and I try to create with the Mostly Climate podcast. Supported by producers Clare Nasir and Grahame Madge and edited by Adrian Holloway, we have conversations about climate-related topics that people want to know about but perhaps don't have the time, energy or inclination to spend hours reading about.

When the IPCC released their new report on the science behind climate change (that's the 3,949-page report I mentioned earlier), the Mostly Climate team dug into the content. We crafted an episode with some frequently asked questions at the beginning (a back and forth between Doug and I trying to work out what new information had come out and why it mattered), followed by interviews with Met Office scientists who had led on writing different chapters of the report.

It's not every day you have Dr. Helene Hewitt OBE and Dr. Chris Jones in your kitchen chatting to you about climate change while you eat your breakfast, but with the podcast you can have just that. We asked them, "What do you hope people take away from this report?" Helene wants you to know that, "It's only by limiting warming that we can reduce the rates of sea-level rise into the future," whilst Chris said, "There is a wide range of possible futures and we can still control which path we follow but the actions that determine that need to be taken now."

Mostly Climate Podcast – the science behind COP

This is the kind of insight I want to get when I listen to podcasts, and as co-host of Mostly Climate I want to bring this content to our listeners. I use my background in climate science and the connections the team have within the Met Office and beyond to break down complex topics and bring expert insights to our audience. By doing this, we hope to make the mountains of data and information on climate change feel a little less overwhelming.

Climate change is a massive global challenge and to tackle it we need everybody to understand the science and solutions. If climate information is inaccessible to people, we can't do this. Podcasts provide one way to tell stories about climate change, so I hope you'll listen in and see what you think.

Get ready for tomorrow. #GetClimateReady

#MostlyClimate

Date Created
June 2022

Over a fifth less traffic on the roads thanks to Storm Eunice warnings

Description

Storm Eunice brought impactful weather to much of England and Wales.

Traffic on England’s roads appeared to reduce by over a fifth during Storm Eunice, as drivers appeared to heed the advice of the Met Office, National Highways, the RAC and emergency responders to take precautions to stay safe during the strongest storm to impact England and Wales since February 2014 .

According to National Highways, there was 21% less traffic than would normally be expected on England’s roads on 18 February, as two rare Met Office Red National Severe Weather Warnings came into force for Storm Eunice.

According to Met Office post-event surveys, 99% of people within the red warning area in the southeast were aware of the warnings, while 98% of those within the red warning area in southwest England and south Wales knew about the warning.

Impactful weather

Storm Eunice came in the middle of a week which saw three named storms affecting the UK, the first

time this has occurred since storm naming was introduced in 2015/2016. These storms came in a turbulent week of wet and windy weather for the UK, which was associated with a powerful jet stream.

Storm Eunice was the most severe and damaging storm of the three storms, bringing the strongest winds with gusts widely over 80mph for many southern areas of the UK and a new England gust speed record of 122mph being reached at an exposed station on the Isle of Wight.

Travel disruption

Disruption was experienced for much of the UK, with a number of power cuts, fallen trees and delayed or cancelled trains.

While disruption on the roads was still keenly felt by those who had no choice but to head out in the conditions, 21% fewer vehicles took to the road in England, helping to lessen some of the traffic issues on blocked routes.

Melanie Clarke, Customer Service Director (Operations) for National Highways, said: “Storms Dudley, Eunice, and Franklin were some of the worst storms experienced in decades and certainly provided us with challenging conditions across our network of motorways and major A roads.

“Even though a lot of people heeded our advice not to travel, our army of traffic officers, control room operators and winter service teams were incredibly busy, keeping roads gritted, responding to incidents, and ensuring our network of motorways and major A roads remained safe.”

That reduction in traffic also helped to ease the burden on the RAC, who experienced a 16% reduction in callouts across the UK than would typically be expected in a day. It was a 34% reduction in callouts for Wales alone.

RAC spokesperson Rod Dennis said: “These figures clearly show that, with enough notice and plenty of clear communication directly to the public, it is possible to change drivers’ behaviour during periods of severe weather. For us, less traffic on the roads during Storm Eunice led to fewer incidents and meant drivers – as well as our patrols – were kept safe.”

Early, accurate forecasts

Drivers, as well as local and national resilience groups, were aided by early, accurate forecasts from the Met Office, with Storm Eunice being named some four days before it struck.

Will Lang looks after managing severe weather events within the Met Office. He said: “While no one wants severe weather to impact their plans, it was vital for everyone’s safety that the public listened to the warnings and understood the risks during this week of impactful weather for the UK.

“We’re very pleased that our early warnings helped people make arrangements to avoid taking to the roads during Storm Eunice. Without that reduction in traffic, the impacts on the roads could have been much worse.”

With three storms in the week, Met Office forecasts aided critical services across the country to help

people to stay safe. From helping the air traffic control service, NATS, to land aircraft in challenging conditions to working with emergency responders as impacts from the weather became clear.

When it really matters, critical services trust the Met Office to provide accurate weather forecasts which support planning and decision making. So you can be sure those forecasts will help you plan your everyday too.

You can check the latest forecast on our website, by following us on Twitter and Facebook, as well as on our mobile app which is available for iPhone from the App store and for Android from the Google Play store. Keep track of current weather warnings on the weather warning page.

Date Created
June 2022